



## SECURITIES AND EXCHANGE COMMISSION

[Release No. 34-91833; File No. SR-OCC-2021-005]

### Self-Regulatory Organizations; The Options Clearing Corporation; Notice of Filing and Immediate Effectiveness of Proposed Rule Change Concerning The Options Clearing Corporation's Synthetic Futures Model

May 10, 2021.

Pursuant to Section 19(b)(1) of the Securities Exchange Act of 1934 (“Act” or “Exchange Act”),<sup>1</sup> and Rule 19b-4 thereunder,<sup>2</sup> notice is hereby given that on April 29, 2021, The Options Clearing Corporation (“OCC”) filed with the Securities and Exchange Commission (“Commission”) the proposed rule change as described in Items I, II, and III below, which Items have been prepared by OCC. OCC filed the proposed rule change pursuant to Section 19(b)(3)(A)<sup>3</sup> of the Act and Rule 19b-4(f)(4)(ii)<sup>4</sup> thereunder so that the proposal was effective upon filing with the Commission. The Commission is publishing this notice to solicit comments on the proposed rule change from interested persons.

#### I. Clearing Agency's Statement of the Terms of Substance of the Proposed Rule Change

OCC is filing a proposed rule change to expand the use of an existing OCC margin model. The proposed changes to OCC's STANS Methodology Description are contained in confidential Exhibit 5 of filing SR-OCC-2021-005. Material proposed to be added to the STANS Methodology Description as currently in effect is underlined and

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<sup>1</sup> 15 U.S.C. 78s(b)(1).

<sup>2</sup> 17 CFR 240.19b-4.

<sup>3</sup> 15 U.S.C. 78s(b)(3)(A).

<sup>4</sup> 17 CFR 240.19b-4(f)(4)(ii).

material proposed to be deleted is marked in strikethrough text. All capitalized terms not defined herein have the same meaning as set forth in the OCC By-Laws and Rules.<sup>5</sup>

II. Clearing Agency's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

In its filing with the Commission, OCC included statements concerning the purpose of and basis for the proposed rule change and discussed any comments it received on the proposed rule change. The text of these statements may be examined at the places specified in Item IV below. OCC has prepared summaries, set forth in sections (A), (B), and (C) below, of the most significant aspects of these statements.

(A) Clearing Agency's Statement of the Purpose of, and Statutory Basis for, the Proposed Rule Change

(1) Purpose

**Background**

In 2019, OCC implemented a new model for Volatility Index Futures.<sup>6</sup> The enhanced model included: (1) the daily re-estimation of prices and correlations using “synthetic” futures;<sup>7</sup> (2) an enhanced statistical distribution for modeling price returns for synthetic futures (i.e., an asymmetric Normal Reciprocal Inverse Gaussian (or “NRIG”)

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<sup>5</sup> OCC's By-Laws and Rules can be found on OCC's public website: <https://www.theocc.com/Company-Information/Documents-and-Archives/By-Laws-and-Rules>.

<sup>6</sup> See Securities Exchange Act Release No. 85870 (May 15, 2019), 84 FR 23096 (May 21, 2019) (SR-OCC-2019-801) and Securities Exchange Act Release No. 85873 (May 16, 2019), 84 FR 23620 (May 16, 2019) (SR-OCC-2019-002). Certain indices are designed to measure the volatility implied by the prices of options on a particular reference index or asset (“Volatility Indexes”). For example, the Cboe Volatility Index (“VIX”) is designed to measure the 30-day expected volatility of the Standard & Poor's 500 index (“SPX”). OCC clears futures contracts on Volatility Indexes. These futures contracts are referred to herein as “Volatility Index Futures.”

<sup>7</sup> A “synthetic” futures time series, for the intended purposes of OCC, relates to a uniform substitute for a time series of daily settlement prices for actual futures contracts, which persists over many expiration cycles and thus can be used as a basis for econometric analysis.

distribution); and (3) a new anti-procyclical floor for variance estimates. The main feature of the enhanced model was the replacement of the use of the underlying index itself as a risk factor<sup>8</sup> (e.g., the VIX) with risk factors that are based on observed futures prices (i.e., the “synthetic” futures contracts). These risk factors are then used in the generation of Monte Carlo scenarios for the futures by using volatility and correlations obtained from the existing simulation models in OCC’s propriety margin system, the System for Theoretical Analysis and Numerical Simulations (“STANS”).<sup>9</sup> Additionally, the model has the ability to accommodate negative prices and interest rates.

On July 10, 2020, OCC filed a proposed rule change to expand the use of the model, currently known as the “Synthetic Futures Model,” to Cboe’s AMERIBOR Futures.<sup>10</sup> On September 30, 2020, OCC filed another proposed rule change to further expand the use of the Synthetic Futures Model to Treasury yield index futures listed by Small Exchange Inc. (“Small”).<sup>11</sup> OCC now proposes to extend the use of the Synthetic Futures Model to certain other products planned to be listed by Small.

### **Proposed Changes**

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<sup>8</sup> A “risk factor” within OCC’s margin system may be defined as a product or attribute whose historical data is used to estimate and simulate the risk for an associated product.

<sup>9</sup> See Securities Exchange Act Release No. 53322 (February 15, 2006), 71 FR 9403 (February 23, 2006) (SR-OCC-2004-20). A detailed description of the STANS methodology is available at <http://optionsclearing.com/risk-management/margins/>.

<sup>10</sup> See Securities Exchange Act Release No. 89392 (July 24, 2020), 85 FR 45938 (July 30, 2020) (SR-OCC-2020-007).

<sup>11</sup> See Securities Exchange Act Release No. 90139 (October 9, 2020), 85 FR 65886 (October 16, 2020) (SR-OCC-2020-012). On December 6, 2019, OCC filed a proposed rule change to execute an Agreement for Clearing and Settlement Services between OCC and Small in connection with Small’s intention to operate as a designated contract market regulated by the Commodity Futures Trading Commission (“CFTC”). See Securities Exchange Act Release No. 87774 (December 17, 2019), 84 FR 70602 (December 23, 2019) (SR-OCC-2019-011).

Small plans to launch new futures products linked to Light Sweet Crude Oil (WTI) (“Crude Oil Futures”). OCC proposes to extend the use of its Synthetic Futures Model to these Small Crude Oil Futures. The Synthetic Futures Model maps the price risk factor of a traded futures product to a synthetic time series constructed from the traded prices of similar tenor futures in history. This allows the model to capture differences in volatility of futures across the term structure. Such differences in volatility are exhibited for futures products whose underlying deliverable is linked to a different tenor of a market observable risk factor such as interest rates, volatility or commodity prices such as crude oil. As a result, OCC believes that the Synthetic Futures Model would provide more appropriate margin coverage for Small Crude Oil Futures than other models in OCC’s inventory.<sup>12</sup>

OCC proposes to make minor modifications to the STANS Methodology Description to note that the STANS methodology generally, and Synthetic Futures Model specifically, would be used to generate margin requirements for Small Crude Oil Futures. Consistent with the existing STANS Methodology Description, OCC would use a fixed NRIX asymmetry parameter for Crude Oil Futures, which OCC believes is better suited to the risk profile of the product as the asymmetry of returns is primarily on the left-tail (or negative returns) and already captured by the GARCH model specifications. Consistent with the original implementation of the Synthetic Futures Model, the Small Crude Oil Futures will also use proportional returns in the calibration. OCC would initially use a fixed scale factor for purposes of determining the long-run variance floor until sufficient data for the Small Crude Oil Futures is available for this scale factor to be

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<sup>12</sup> For example, OCC also maintains a “Generic Futures Model,” which is a simple model based on the cost of carry that is primarily used to margin equity-like futures such as SPX futures and can be used to model certain interest rates futures. This model has certain limitations (e.g., the model cannot currently accommodate negative prices and rates).

calibrated on a regular basis. The scale factor setting will be reviewed periodically based on the futures data and adjusted, if appropriate. Finally, the model will use market prices of futures after the product launch and use proxy data<sup>13</sup> for historical dates prior to product launch to support the model calibration.

(2) Statutory Basis

OCC believes the proposed rule change is consistent with Section 17A of the Act<sup>14</sup> and the rules thereunder applicable to OCC. Section 17A(b)(3)(F) of the Act<sup>15</sup> requires, in part, that the rules of a clearing agency be designed to promote the prompt and accurate clearance and settlement of derivative agreements, contracts, and transactions and to assure the safeguarding of securities and funds which are in its custody or control or for which it is responsible. The proposed rule change would make minor changes to the STANS Methodology Description so that the Synthetic Futures Model can be used to model Small Crude Oil Futures. OCC believes the Synthetic Futures Model may provide better margin coverage for these products than other margin models maintained by OCC. OCC uses the margin it collects from a defaulting Clearing Member to protect other Clearing Members from losses that may result from the default and ensure that OCC is able to continue the prompt and accurate clearance and settlement of its cleared products. Moreover, OCC believes that accurate calculation of margin requirements is necessary to help OCC manage the risk of a Clearing Member default without recourse to the assets of non-defaulting Clearing Members, which supports the safeguarding of securities and funds in OCC's custody or control. OCC therefore

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<sup>13</sup> The proxy data for Small Crude Oil futures will be constructed from similar tenor ICE WTI futures.

<sup>14</sup> 15 U.S.C. 78q-1.

<sup>15</sup> 15 U.S.C. 78q-1(b)(3)(F).

believes that the proposed rule change is consistent with the requirements of Section 17A(b)(3)(F) of the Act.<sup>16</sup>

Exchange Act Rules 17Ad-22(e)(6)(i), (iii), and (v)<sup>17</sup> further require that a covered clearing agency establish, implement, maintain and enforce written policies and procedures reasonably designed to cover its credit exposures to its participants by establishing a risk-based margin system that, among other things: (1) considers, and produces margin levels commensurate with, the risks and particular attributes of each relevant product, portfolio, and market; (2) calculates margin sufficient to cover its potential future exposure to participants in the interval between the last margin collection and the close out of positions following a participant default; and (3) uses an appropriate method for measuring credit exposure that accounts for relevant product risk factors and portfolio effects across products. OCC believes that using the Synthetic Futures Model for Small Crude Oil Futures would produce margin levels commensurate with the risks and particular attributes of the product in question, generate margin requirements to cover OCC's potential future exposure to its participants, and appropriately take into account relevant product risk factors for Small Crude Oil Futures.<sup>18</sup> In this way, OCC believes the proposed rule change is consistent with the requirements of Rules 17Ad-22(e)(6)(i), (iii), and (v).<sup>19</sup>

(B) Clearing Agency's Statement on Burden on Competition

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<sup>16</sup> Id.

<sup>17</sup> 17 CFR 240.17Ad-22(e)(6)(i), (iii), and (v).

<sup>18</sup> OCC has provided backtesting analysis for the proposed change in confidential Exhibit 3 to File No. SR-OCC-2021-005.

<sup>19</sup> 17 CFR 240.17Ad-22(e)(6)(i), (iii), and (v).

Section 17A(b)(3)(I) of the Act<sup>20</sup> requires that the rules of a clearing agency not impose any burden on competition not necessary or appropriate in furtherance of the purposes of the Act. OCC does not believe that the proposed rule change would have any impact or impose a burden on competition. The Synthetic Futures Model would be used for Small Crude Oil Futures for all Clearing Members upon the launch of the new products. As a result, OCC does not believe that the proposed rule change would unfairly inhibit access to OCC's services or disadvantage or favor any particular user in relationship to another user. Moreover, OCC expects that the Small Crude Oil Futures would account for a small part of OCC's overall clearing activity given the newness of the product and the size of OCC's futures clearing business as a share of OCC's total cleared product set. OCC therefore does not believe that the proposed rule change would have any impact or impose a burden on competition.

(C) Clearing Agency's Statement on Comments on the Proposed Rule Change Received from Members, Participants or Others

Written comments on the proposed rule change were not and are not intended to be solicited with respect to the proposed rule change and none have been received.

III. Date of Effectiveness of the Proposed Rule Change and Timing for Commission Action

Pursuant to Section 19(b)(3)(A) of the Act,<sup>21</sup> and Rule 19b-4(f)(4)(ii) thereunder,<sup>22</sup> the proposed rule change is filed for immediate effectiveness because it effects a change in an existing service of OCC that (i) primarily affects the clearing operations of OCC with respect to products that are not securities and (ii) does not significantly affect any securities clearing operations of OCC or any rights or obligations

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<sup>20</sup> 15 U.S.C. 78q-1(b)(3)(I).

<sup>21</sup> 15 U.S.C. 78s(b)(3)(A).

<sup>22</sup> 17 CFR 240.19b-4(f)(4)(ii).

of OCC with respect to securities clearing or persons using such securities clearing services.

At any time within 60 days of the filing of the proposed rule change, the Commission summarily may temporarily suspend such rule change if it appears to the Commission that such action is necessary or appropriate in the public interest, for the protection of investors, or otherwise in furtherance of the purposes of the Act.<sup>23</sup>

#### IV. Solicitation of Comments

Interested persons are invited to submit written data, views and arguments concerning the foregoing, including whether the proposed rule change is consistent with the Act. Comments may be submitted by any of the following methods:

##### Electronic Comments:

- Use the Commission's Internet comment form (<http://www.sec.gov/rules/sro.shtml>); or
- Send an e-mail to [rule-comments@sec.gov](mailto:rule-comments@sec.gov). Please include File Number SR-OCC-2021-005 on the subject line.

##### Paper Comments:

- Send paper comments in triplicate to Secretary, Securities and Exchange Commission, 100 F Street, NE, Washington, DC 20549-1090.

All submissions should refer to File Number SR-OCC-2021-005. This file number should be included on the subject line if e-mail is used. To help the Commission process and review your comments more efficiently, please use only one method. The Commission will post all comments on the Commission's Internet website (<http://www.sec.gov/rules/sro.shtml>). Copies of the submission, all subsequent amendments, all written statements with respect to the proposed rule change that are filed

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<sup>23</sup> Notwithstanding its immediate effectiveness, implementation of this rule change will be delayed until this change is deemed certified under CFTC Rule 40.6.



with the Commission, and all written communications relating to the proposed rule change between the Commission and any person, other than those that may be withheld from the public in accordance with the provisions of 5 U.S.C. 552, will be available for website viewing and printing in the Commission's Public Reference Room, 100 F Street, NE, Washington, DC 20549, on official business days between the hours of 10:00 a.m. and 3:00 p.m. Copies of such filing also will be available for inspection and copying at the principal office of OCC and on OCC's website at <https://www.theocc.com/Company-Information/Documents-and-Archives/By-Laws-and-Rules>.

All comments received will be posted without change. Persons submitting comments are cautioned that we do not redact or edit personal identifying information from comment submissions. You should submit only information that you wish to make available publicly.

All submissions should refer to File Number SR-OCC-2021-005 and should be submitted on or before **[INSERT DATE 21 DAYS FROM PUBLICATION IN THE FEDERAL REGISTER]**.

For the Commission, by the Division of Trading and Markets, pursuant to delegated authority.<sup>24</sup>

**J. Matthew DeLesDernier,**

*Assistant Secretary.*

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<sup>24</sup> 17 CFR 200.30-3(a)(12).